

the International, the Utah Consolidated stands to get the most considerate treatment and the return in the form of dividends of a portion of the money paid for the reduction of its ores. After the closing of its own plant it shipped to the American Smelting & Refining company's works at Garfield under a two year contract. The contract rate was considered reasonable, but is high in comparison with the charges that will be made by the new smelter.

In the opinion of everyone who has seen it, the International is the most effective institution for the separation of copper, gold and silver from their native rock to be found in the United States. It is not very large as yet, having a furnace capacity of only 2,000 tons a day, but its stack and other vital organs are big enough to operate a vastly greater furnace equipment.

The Utah Consolidated still holds the world's record for low cost copper production, none of the new copper giants having been able to equal the 5-cent rate established when the Utah was young and extracting high-grade sulphides from near the surface. The Utah Con. itself may never be able to equal its own record in that respect again. Nevertheless the future cost of its copper bullion will be much lower than for several years past.

R. H. Channing, Jr., has returned to the company as consulting engineer during the year. In October he began checking up its assets and was understood to be preparing a comprehensive description of the underground conditions. His report has not been submitted. Until it is ready for inspection the public must rely upon the last annual statement, made last April, and covering the operations to the end of December, 1909. The reserves of sulphide ore at the conclusion of that period were estimated to contain 1,121,360 tons.

Dividend payments were suspended this year, chiefly because the directors did not think it good policy to make them out of the cash reserve until the company was in a position to replace them from the current earnings.

TINTIC DISTRICT FORGES ON.

If all the mines in Tintic had done as well in 1910 as the Sioux Consolidated, not a single lament would be heard from that section. Its dividends since April amount to \$89,448, which is 12 cents a share on the stock outstanding. When the last report was given out in November there was in the bank to the credit of the company \$62,787.36, more than enough for two 4-cent dividends. Payments have been made quarterly since the first of the year.

The mine stands up wonderfully well under the demands made upon it. Altogether it has earned for its owners \$880,701.56 in profits. Timid shareholders have been frightened out from time to time by reports that the ore bodies were exhausted and dividends a thing of the past. The effect of these periodical scares has been to create phenomenal bargains for investors and those who have purchased shares on the breaks have enjoyed liberal profits, both from the dividends and from the raises in price which have followed the disproof of pessimistic reports.

Excellent judgment has been shown by the management in directing the development work. The group of mines on the west side of the mountain controlled by Col. C. E. Loose and others interested in the Sioux, have been more occupied this last year in preparing for future activities than in making a record for production. The benefits of this policy will appear in the next few months in a large output and greatly reduced mining and operating expenses.

The Gold Chain company, which is itself the result of a consolidation of the Gold Chain and Ajax properties, has formed a connection with the Opohongo which is mutually beneficial. Their

workings have been united and the two corporations have purchased jointly a large hoist and a 16-drill compressor with other modern equipment which has been placed at the Gold Chain shaft.

Enough ore has been shipped by the Opohongo to meet all the expenses of operation and development, and a great deal more has been blocked between the 500 and the 900 levels. Some of it runs up in the pictures in gold and the whole of a very broad ledge yields rock of a shipping grade. A railroad spur is being constructed to the Opohongo and Gold Chain which will eliminate one handling of the ore and help to lower production costs.

Without undertaking to work its resources to the limit the Grand Central has kept a stream of ore moving to the smelters and has awarded its shareholders \$45,000 in profits.

Victoria Mining company, which began 1910 with 250,000 shares, ends the year as the Victoria Consolidated Mining company, with 700,000 shares. The change was made at a meeting of the stockholders held in July. The new company issued two shares for one and put 200,000 shares in the treasury. It has also acquired the Snowflake group of fractional claims for \$40,000. Victoria shareholders have received one dividend of 4 cents a share, and would have received more had a large part of the income not been utilized in sinking the shaft from the 500 to the 1,000-foot level.

Incidentally the driving of the Victoria shaft brought to light a vein of new ore that may prove an important factor in the upbuilding of the treasury.

From time to time there has been talk of a consolidation of the Victoria, Grand Central, Gold Chain and Opohongo, either on their own account or under the wing of the United States Mining company. Some deal of this sort may be made later, but up to the present time the rumors have been met with official denials.

FINE RECORD OF DALY-WEST.

For the Daly-West Mining Co. the past year has been a period of pacification, during which old animosities have been healed and there is ample reason to believe that the coming twelve months will ripen the fruit of this harmonious spirit.

Development having shown that the ore bodies in the lower levels of the mine, while quite extensive are lower grade than the product of the stopes above the 1,500 level, the management has given much study to methods by which the decreased values can be offset through more economical methods of mining, handling and concentrating. Work along this line has not reached the point at which reliable estimates can be set down in figures, but sufficient progress has been made to satisfy those interested that the present cost of mental production can be greatly reduced.

A modern milling plant of large capacity would, in itself, shave a large percentage from the concentration charges and such a plant located at the portal of the Ontario drain tunnel and operated by electrical power generated by the outflowing water would clearly bring into the profitable class thousands of tons of ore that is worthless under present conditions.

A business man in no way connected with the Daly-West, but who is familiar with conditions at Park, said not long since that a suitable mill, fed by gravity would effect a saving of not less than 25 per cent. and possibly as much as 40 per cent. in the cost of production.

A working agreement of an actual consolidation of the mines in the territory drained by the Ontario tunnel would insure an ore supply great enough to confer all the benefits of wholesale operation. A deal closed last summer and ratified within the last few weeks gives the Daly-West a substantial interest in the Thompson and West

Quincy groups, two large and well-located estates whose resources are still intact. The Daly-West also possesses quite a block of stock on the Little Bell property, from which it has been drawing dividends for a year past.

In the meantime the company has done excellent work in prospecting the deeper reaches of its own ground. The main shaft was driven to the tunnel level a year ago. Since that accomplishment numerous levels have been run and some large ore deposits brought into view. With the candor that has always marked its statements regarding physical conditions the management has informed the stockholders that certain parts of the vein have not shown the dimensions at first indicated and the general manager, Ernest Bamberger, has frankly advised delay in the execution of the mill project until more is known of the mineral resources below the 1,500 level.

Dividend payments were discontinued after the June distribution in order that the treasury might be in a condition to meet the demands that might be made upon it for new construction and further development. There was cash on hand at the time of the last report \$147,114.77, which is, it must be conceded, a very healthy working balance.

Notwithstanding the curtailment of production, the receipts of the Daly-West are sufficient to pay a large part of the expense incident to the development program. Especially gratifying are the results attained in the old workings of the mine by the adoption of the leasing system. Although the ground above the 1,500 level was popularly supposed to be worked out, the employees of the company to whom the leases were granted have been able to make more than their former wages and, at the same time, pay royalties equivalent to the profits that would accrue under the most favorable aspect of company operation.

New resources are indicated by the showing in the extension of the 1,550 level which was made to connect with and drain some of the workings of the Daly-Judge. Ore has been entered by the drift. Although the examination of it has not been sufficient to justify an estimate of its value the discovery holds out the hope of splendid returns during the coming year.

MASON VALLEY.

Unless all signs fail 1911 will be the most important year in the history of the Mason Valley Mines company, as it will witness the fruition of its plans for marketing the vast quantity of ore developed in its property at Yerington. The railroad from Wabuska has reached and is building beyond the town of Mason and the smelter to be erected three miles from Wabuska has been started. In seven months, the builders assert, the plant will be ready to take the copper out of the masses of ore blocked out in the Mason Valley and other Yerington mines. At the Mason Valley alone, engineers say, one million tons of shipping ore is in sight.

INSPIRATION.

Arizona as a state will certainly maintain the supremacy it has enjoyed as a territory in the production of copper. The old mines look better than ever and the new ones in the disseminated copper class, after years of preparation, are almost ready to multiply the total of the annual metal output. One of the best of the new ones is the Inspiration Copper company, near Globe. It has demonstrated by means of drifts and drills a body of commercial ore 3,800 feet long. One drift is in 2 per cent. copper rock for 2,000 feet. The width of the deposit is so great that the crosscutting done up to this time has not established its limits, although one cut has been driven for 1,400 feet.